

### **REMARKS**

Claims 1 and 18 have been amended. No new matter has been introduced. Claims 8-13, 17, 21, 25, 28, 33-38, 40, 41, 42, and 44-57 have been canceled. Claims 1-7, 14, 15, 16, 18, 19, 20, 22, 23, 24, 26, 27, 29-32, 39, and 43 are currently pending.

### **Specification Objections**

The Abstract stands objected to because of the use of the term “comprising.” The Abstract has been amended to obviate the objection. Accordingly, Applicant respectfully submits that the objection be withdrawn.

The Specification stands objected to as allegedly not disclosing the “first support” and the “second support.” Applicant respectfully traverses the objection. As illustrated in FIG. 11 of the disclosure, a first support (in this case first reference 1112) and a second support (in this case second reference 1122) are disclosed. Applicant respectfully submits that claim 3 reads on the embodiment disclosed in FIG. 11 by reciting a “first support projecting from the die” (reference numeral 1112) and “a second support fixed to the optics unit” (reference numeral 1122). As such, Applicant respectfully submits that the Specification fully supports claim 3, and requests that the objection to the Specification be withdrawn.

### **Claim Rejections**

Claim 3 stands rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement. For the reasons discussed above with respect to the Specification, Applicant respectfully submits that claim 3 is fully supported by the disclosure, and that the rejection be withdrawn.

Claims 1-6, 14, 15, 18, 19, 20, 22, 23, 26, 27, and 29-31 stand rejected under 35 U.S.C. §102(b) as being anticipated by Segawa (U.S. Pub. No. 2002/0057468). Applicant respectfully traverses the rejection.

Embodiments of the invention relate to imagers having imaging units and optics units attached thereto, and methods for packaging the imagers. *See* Abstract. As such, claim 1 recites an imager having “a microelectronic die with an image sensor and a first referencing element fixed to the imaging unit; and an optics unit having an optic member and a second referencing element fixed to the optics unit, the second referencing element being seated and in direct contact with the first referencing element at a fixed, preset position in which the optic member is situated at a desired location relative to the image sensor.”

Segawa relates to an image pick up apparatus. *See* Segawa Abstract. Segawa fails to disclose, teach, or suggest a microelectronic die with an image sensor and a first referencing element fixed to the imaging unit; and an optics unit having an optic member and a second referencing element fixed to the optics unit, “the second referencing element being seated and in direct contact with the first referencing element at a fixed, preset position in which the optic member is situated at a desired location relative to the image sensor,” as recited by claim 1. Indeed, each and every embodiment disclosed by Segawa shows a flexible board (8) between its connector (12) and its lens barrel (18). *See* Segawa at FIGS. 1, 2, 3A-3D, and 4; *see also id.* at ¶¶ [0031]-[0036]. For at least this reason, Segawa fails to disclose, teach, or suggest a “second referencing element being seated and in direct contact with [a] first referencing element at a fixed, preset position,” as recited by claim 1. Applicant respectfully submits that claim 1 and its dependent claims 2-6 are allowable over Segawa, and that the rejection be withdrawn.

Claim 14 is also allowable over the cited reference. Specifically, Segawa fails to disclose, teach, or suggest “a first referencing element fixed relative to the die, the first referencing element having a first alignment component at a lateral distance from the image sensor and a first stop component spaced apart from the image sensor along an axis normal to the image sensor by separation distance,” and “a second referencing element connected to the optics unit, the second referencing element having a second alignment component engaged with the first alignment component.” Claim 14’s first referencing element has both a first alignment component and a first stop component. The Office Action asserts (at p. 8) that Segawa’s alleged first referencing element has both elements, but further review shows that two separate elements are cited for the first

alignment component (Segawa's connector 12a) and a first stop component (Segawa's external connection terminal 8b). As claim 14's first referencing element requires both a first alignment component and a first stop component, Segawa fails to disclose, teach, or suggest each and every limitation of claim 14. For at least this reason, Applicant respectfully submits that claim 14 and its dependent claim 15 is allowable over Segawa, and that the rejection be withdrawn.

Claim 18 recites similar limitations to claim 1, and is allowable for at least the same reasons discussed above with respect to claim 1. Claims 19, 20, 22, and 23 depend from claim 18, and are allowable for at least the same reasons, and on their own merits.

Claim 26 is also allowable over the cited reference. Specifically, Segawa fails to disclose, teach, or suggest a "second stand-off section having a second interface area at a set reference position relative to the optic member." The Office Action asserts (at p. 10) that Segawa's alleged second reference includes the claimed second interface; however, closer inspection of the reference shows that the alleged stand-off section is separate and apart from the second interface area. Accordingly, Segawa fails to disclose, teach, or suggest a "second stand-off section having a second interface area at a set reference position relative to the optic member," as recited by claim 26. For at least this reason, Applicant respectfully submits that claim 26 and its dependent claims 27 and 29, 30, and 32 are allowable over Segawa, and that the rejection be withdrawn.<sup>1</sup>

Claims 7, 16, 24, 31, 39, and 43 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Segawa in view of Johnson (U.S. Patent No. 5,861,654). Applicant respectfully traverses the rejection.

Claims 7, 16, 24, and 31 depend from claims 1, 14, 18, and 26, respectively. For the reasons discussed above with respect to claims 1, 14, 18, and 26, Segawa fails to disclose, teach, or suggest, each and every limitation of claims 7, 16, 24, and 31, respectively. Furthermore, Johnson relates to an imager sensor assembly (*see* Johnson at Title), and fails to cure the deficiencies of

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<sup>1</sup> Applicant respectfully notes that claim 32 was not addressed by the Office Action, and for this additional reason, claim 32 should be allowable over the cited reference.

Segawa. For at least this reason, Applicant respectfully submits that claims 7, 16, 24, and 31 are allowable over the combination, and that the rejection be withdrawn.

Claim 39 is also not rendered obvious by the combination. Specifically, Segawa fails to disclose, teach, or suggest “attaching the second referencing element to the first referencing element by seating the second interface feature with the first interface feature in a predetermined position in which the optic member is at a desired location relative to the image sensor,” as recited by claim 39. For the reasons discussed above with respect to claim 1, Segawa fails to disclose its alleged second interface *attached to* its alleged first interface. Indeed, each and every one of Segawa’s embodiments, the alleged first and second interfaces are each attached to a flexible board (8), and not to each other, as required by claim 39. Johnson fails to cure the deficiencies of Segawa. Indeed, the Office Action relies on Johnson as allegedly disclosing a method of packaging an imager; Johnson however, fails to disclose, teach, or suggest “attaching the second referencing element to the first referencing element by seating the second interface feature with the first interface feature in a predetermined position in which the optic member is at a desired location relative to the image sensor,” as recited by claim 39.

For at least this reason, Applicant respectfully submits that claim 39 and its dependent claim 43 are allowable over the combination, and that the rejection be withdrawn.

In view of the above amendment, applicant believes the pending application is in condition for allowance.

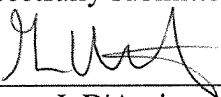
Application No. 10/723,363  
Reply to Office Action of February 4, 2008  
Date of Response: May 5, 2008

Docket No.: M4065.1286/P1286

The Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 04-1073, under Order No. M4065.1286/P1286.

Dated: May 5, 2008

Respectfully submitted,

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